

Title (en)
VARIABLE VALVE CONTROL FOR INTERNAL COMBUSTION ENGINE

Title (de)
VARIABLE VENTILSTEUERUNG FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)
COMMANDE DE SOUPAPES VARIABLE POUR MOTEUR À COMBUSTION INTERNE

Publication
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Application
EP 08792495 A 20080808

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- JP 2008064618 W 20080808
- JP 2007209706 A 20070810
- JP 2007214529 A 20070821
- JP 2008043126 A 20080225
- JP 2008047918 A 20080228

Abstract (en)
[origin: EP2025887A1] A variable valve driving apparatus of an internal combustion engine, including a drive shaft rotatably supported by a cam bracket, a drive cam disposed about an outer periphery of the drive shaft, a link arm having a first end connected to the drive cam, an oscillating cam extending from the drive cam configured to press and release a drive valve of the engine to open and close the drive valve, a link rod having a first end rotatably connected to the oscillating cam, and a control shaft rotatably supported by the cam bracket. The control shaft includes a main shaft rotatably supported by the cam bracket, an eccentric shaft spaced apart from the main shaft, and a plurality of webs connecting the main shaft and the eccentric shaft. The eccentric shaft is connected to an oscillating arm configured to transfer a drive force of the drive cam. The oscillating arm has a first portion rotatably connected to a second end of the link arm and a second portion rotatably connected to a second end of the link rod, the first and second portions being spaced apart axially with respect to the eccentric shaft. A first flow path for supplying lubricant to a first sliding contact area between the oscillating arm and the eccentric shaft is formed through the control shaft. The first flow path extends from the main shaft to the eccentric shaft through a web located beside the second portion of the oscillating arm.

IPC 8 full level
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Citation (search report)

- [X] EP 1258601 A2 20021120 - UNISIA JECS CORP [JP], et al
- [A] EP 1236870 A2 20020904 - UNISIA JECS CORP [JP], et al
- [A] JP 2001055915 A 20010227 - UNISIA JECS CORP, et al
- [A] EP 1026370 A2 20000809 - UNISIA JECS CORP [JP], et al
- [A] DE 10109234 A1 20010920 - NISSAN MOTOR [JP], et al
- [A] US 6041746 A 20000328 - TAKEMURA SHINICHI [JP], et al
- [A] JP 2006329023 A 20061207 - MAZDA MOTOR
- [A] US 6019076 A 20000201 - PIERIK RONALD JAY [US], et al
- [A] US 5937809 A 19990817 - PIERIK RONALD JAY [US], et al
- See references of WO 2009022734A1

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